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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,968	02/24/2000	David R. Hembree	MI22-869	5950
21567	7590	02/17/2004	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			NGUYEN, VINH P	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/512,968

Applicant(s)

HEMBREE, DAVID R.

Examiner

VINH P NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 64-110 is/are pending in the application.
- 4a) Of the above claim(s) 66, 76, 93-96, 99 and 100 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 81-90, 97, 98, 101 and 102 is/are allowed.
- 6) ☒ Claim(s) 64-65, 67-75, 77-80, 91-92, 103-110 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1003.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Claims 67-68,73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 67, it appears that the limitation of this claim is inaccurate since it is impossible for the interconnect electrically coupled the first surface and the second surface of the wafer holder.

In claims 68 and 73, it is unclear whether the wafer holder is the same "a chuck". What are differences between the chuck and the wafer holder.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 79-80 are rejected under 35 U.S.C. 102(e) as being anticipated by Berger et al (Pat # 6,020,750).

As to claim 79, Berger et al disclose a wafer test and burn-in platform as shown in figure 2 having a wafer holder (16,26,28) having circuitry (26,28) configured to communicate a process signal from a received wafer (12) having electrical couplings (electrical contact regions on the wafer).

As to claim 80, it appears that the wafer holder is adapted to expose the wafer to a

processing environment to process the wafer (testing environment). It is noted that the word “process” is defined as a series of actions, changes, or functions bringing about a result, testing environment would be qualified for this definition. However the term “process” is not necessary related to a method of making.

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 64-65,69-71,75,77-80,103-110 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnes et al (Pat # 5,670,066).

As to claims 64, 69,70,77, 79-80,103,104,108-110, Barnes et al disclose a vacuum plasma processor as shown in figure # 1 having a wafer (32) and a wafer holder/chuck (30) with electrical coupling (combination of electrodes (34,38) and electrical wires connected to the “capacitance measuring device “80”). It is noted that Barnes et al do not mention about the wafer has electrical couplings. However, it would have been well-known in the art that the wafer

would have electrical coupling (traces or pads) on its back. Furthermore, it is noted that the device of Barnes et al is a wafer processing device, therefore, it would have been also well known in the semiconductor art that this device is used for fabrication of integrated circuitry on the surface of the wafer and these integrated circuits of a plurality of respective dies to be singulated from the wafer at a subsequent moment in time.

As to claim 65, Barnes et al also disclose a data gathering device (80) coupled with electrical couplings (34,38) of the wafer holder (30) and configured to receive the signals,

As to claim 71, the chuck/wafer holder (30) of Barnes et al receives a production wafer (32).

As to claim 75, it appears that the electrical couplings (combination of electrodes (34,38) and electrical wires connected to the "capacitance measuring device "80") comprises a conductive column configured to extend outward from plural surfaces of the wafer holder (30).

As to claim 78, it appears that the wafer holder (30) of Barnes et al is adapted to expose the wafer to a processing environment to process the wafer (32).

As to claims 105-107, it appears that the device of Barnes et al includes a processing area (space within the chamber (10)) and the integrated circuits on the wafer would be singulated from the wafer at a subsequent moment in time.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 91-92 rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al (Pat # 6,020,750).

As to claim 91, Berger et al disclose a wafer test and burn-in platform as shown in figure 2 having a wafer holder (16,26,28) having circuitry (26,28) configured to communicate a process signal from a received wafer (12) having electrical couplings (electrical contact regions on the wafer) . Berger et al do not mention about the vacuum chuck in figure 2. However, Berger et al teach that it would have been well known in the art to use vacuum chuck for holding the wafer under test (see column 7. lines 39-50) so that the wafer is held tightly without using any mechanical holder so that damage of the wafer could be avoided.

As to claim 92, it appears that the workpiece holder is adapted to expose the electronic device workpiece to a processing environment to process the wafer (testing environment).

It is noted that the word "process" is defined as a series of actions, changes, or functions bringing about a result, testing environment would be qualified for this definition. However the term "process" is not necessary related to a method of making.

8. Claims 72 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes et al (Pat # 5,670,066) in view of Ollendorf et al (pat # 4,006,909).

Barnes et al disclose a vacuum plasma processor as shown in figure # 1 having a wafer (32) and a wafer holder/chuck (30) with electrical coupling (combination of electrodes (34,38) and electrical wires connected to the "capacitance measuring device "80") as mentioned in paragraph #5. However, Barnes et al do not have a vacuum chambers in the chuck. As to claims 72 and 74, Ollendorf et al teach that it would have been well known to have vacuum chambers (16) in the chuck so that the vacuum is used to hold down the work piece. It would have been obvious for one of ordinary skill in the art to provide vacuum chambers as taught by Ollendorf et al to the device of Barnes et al so that the wafer is held down tightly to the chuck.

9. Claims 81-90,97-98,101-102,111 are allowable since the prior art does not disclose an electronic device workpiece processing apparatus having an electronic workpiece including a sensor and an electrical coupling configured to provide electrical connection of the sensor with the electrical coupling of the second surface of the intermediate member.

10. Applicant's arguments filed on 11/ 07 /03 have been fully considered but they are not persuasive.

Applicants argued that claims 93-96 and 99-100 are generic to species of figure 3. Examiner disagrees with Applicants about this issue because the combined limitations of these

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instant claims read specifically on figures 9 and 10 because contact plate (90) is shown only in these figures but not in elected figure 3. Furthermore, since generic claim 64 has not been allowed, claims 66 and 76 drawn to different species, has been withdrawn from consideration. Therefore, it would be proper to withdrawn these claims 66,76,93-96 and 99-100 from consideration. However, claims 83 and 87 are now allowed since the generic claim 81 is allowable.


11. The disclosure is objected to because of the following informalities: "processing area" do not have support in the disclosure.

Appropriate correction is required.

12. The proposed drawing correction filed on 10/20/03 have not been approved by Examiner because the added feature such as "processing area" does not have support in the specification.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900 .


VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2829
01/22/04